

PRECIPITATION.

In General.—The precipitation of rain and melted snow is shown by Chart No. III. The comparison, with the average for many years, shows a large excess in the South Atlantic States and Portland, Oregon, and a decided excess in the Eastern Gulf States and upper Mississippi valley. A deficiency is apparent in the Ohio valley and Tennessee.

Snow-fall.—The following snow-falls (in inches) are reported from the volunteer stations: Col., Golden City, 11.4, Estes Park, 5½; Conn., Southington, 3½, Colchbrook, 10; Dak., Firesteel, 1½; Iowa, Monticello, 1, Council Bluffs, 5½ and 6.3, Rockford, 6½, Nora Springs, 7½; Kansas, LeRoy, 5, Ellinwood, 6½; Maine, West Waterville, 12½, Orono, 9; Mass., Somerset, 3½, Springfield, 4, Andover, 8, Lawrence, 13, Worcester, 13, (fell on 4th,) Westboro, 13, Waltham, 14, Florida, 15, (at close of month, the snow was 1 foot deep in the forests;) Mo., Corning, 3; Neb., Norfolk, 5, Genoa, 12½; N. H., Plaistow and Shelburn, 11½, Auburn, 29; N. Y., Jacksonville, 1, South Hartford, 2, South Trenton, 3½; Vt., Newport, 5, Woodstock, 12, Strafford, 16; Va., Snowville, 1; Wis., LeRoy, 2½, Neillsville, 6-8. The snow-storm of the 1st was, at Denver, Col., considered to be the severest experienced in eight years. The melting of the snow in the great Salt Lake valley gave rise to great floods there on the 26th, and on 30th creeks were steadily rising in Colorado.

Heavy Rains.—1st to 3d, Carlowville, Ala., in 40 hours 8.75 in. rain; also at Montgomery, Ala., over 8 inches; at Troy, Ala., on 1st and 2d, 4.8 in.; Guttentburg, 12th to 13th, 3.3 in. rain, causing floods in creeks; Oregon, Mo., heavy rain-storm 11th, raising the creek 6 ft. higher than ever known.

Hail.—Hail-storms, sometimes of considerable severity, were reported as follows: 1st, Brookhaven, Miss.; 12th, Mattoon, Decatur, Ill., Atchison, Kan., Woodmere Cemetery, Mich.; 14th, Fort Wayne, Ind.; 15th, Wabash, Ind.; 19th, Stanley, Kan.; 22d, Topeka and Manhattan, Kan., (stones 2 inches in diameter fell, and to a depth of 10 inches;) 23d, Howard, Neb., 26th, Ellinwood, Kan.; 27th, Rock Island, Erie, Ill.; 29th, Ellinwood, Kan.

Drought.—But few droughts have been reported. At Newport, Fla., at the close of the month the potatoes were suffering from drought. At Wellborn, Fla., the month was dry, and cotton and corn were dying. At Wilsonville, Ala., crops were suffering at the close of the month.

Rainy Days.—The number of rainy days, as recorded by the Signal Service observers, is greatest in the Lower Lake region, where it amounts from 13 to 19; in the Upper Lake region it ranges from 7 to 9. On the Middle Atlantic coast, the range is from 11 to 17. In New England, from 10 to 15. In the South Atlantic and Eastern Gulf States, the range is from 6 to 10. In the Northwest, the numbers range from 8 to 15; Mt. Washington, 13. The greatest number of rainy days reported is 22 at Portland, Oregon, and 20 at Pittsburgh.

Cloudy Days.—The number of cloudy days, as reported by the volunteer observers, is about as follows: In the South Atlantic States, 3 to 9; Eastern Gulf, 7 to 10; Middle and Eastern States, 5 to 14; for the Lake region and Northwest, 6 to 12; for the Southwest, 3 to 6.

RELATIVE HUMIDITY.

The average relative humidity for the month is from 70 to 75 per cent. at stations on the immediate Gulf coast; about 65 per cent. for stations on the south Atlantic coast; about 70 per cent. for the middle Atlantic coast stations. It diminishes as we proceed toward the Ohio valley, where it ranges from 52 to 57 per cent.; but again increases as we proceed northward and westward, and amounts to 60 per cent. for the Northwest and 65 per cent. for the Lake region. The average, uncorrected for elevation, is: Mt. Washington, 92 per cent.; Santa Fe, Denver, Colorado Springs and Cheyenne, about 41 per cent.; San Francisco and San Diego, 70 per cent.

WINDS.

Prevailing Winds.—The prevailing directions of the wind for the month are shown by the arrows upon chart No. II. They are from the northwest in New England and the Middle States; from the south in the Gulf States; from the southwest at the Rocky Mountain stations.

Total Movements.—The largest total movements of the air have, when above 10,000 miles, been as follows: Manhattan, Kan., 11,522; Kittyhawk, 11,438; Long Branch, 11,158; Sandy Hook, 11,075; Thatcher's Island, 11,065; Cape Hatteras, 11,043; Indianola, 10,928; Dodge City, 10,923; Barnegat, 10,417; Breckenridge, 10,209; Cheyenne, 10,043. The smallest total movements of the air, when below 4,000 miles, have been as follows: Lynchburg, 3,036; Augusta, 3,179; Nashville, 3,307; Wytheville, 3,354.

High winds or severe storms have been reported from Carbondale, Ill., on the 20th; Cresco, Iowa, on the 4th and 21st; Genoa, Neb., 4th and 9th. A velocity of 50 miles per hour was reported from Flushing on the 7th and 29th, and of 52 miles per hour on the evening of the 4th. High wind, 29th, at Belmont Farm, Texas. Violent gale, 3d, at Coalville, Utah.

Tornadoes.—One began in Iowa, in the evening of the 11th, in Wright county, traversing Franklin county, and last heard of in Clayton county, 150 miles to the east of its origin; a second occurred near Louisville, Ky., on the 14th. Water-spout at Fountain, Minn., 13th. Tornado near Barnegat, N. J., 16th, and near Dodge City, Kan., 26th.